A NEW AULETES FROM CALIFORNIA

(Curculionidæ, Coleoptera)

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Auletes mariposæ Zimmerman, n. sp.

Small, robust, shining, submetallic, greenish blue, darker beneath, prothorax and head usually with violaceous reflections, antennæ black; pile sparse, suberect, rather long, white.

Head wider than long, sparsely and coarsely punctate, with a median frontal carina which is divergent anteriorly to form a number of small carinæ on the base of the beak, less pronounced or obsolete in the female, rugose beneath, at the sides and at the base; eyes very prominent; beak stout, longer than prothorax, finely and sparsely punctate above, sides with large, deep, broad punctures; scrobes broad, beginning near middle of the beak; antennæ inserted at basal third, club large, loosely articulated, densely pubescent, shorter than the preceding portion of the antenna, the third segment acute, triangular. Prothorax wider than long, apex much narrower than base, disk smooth or sparsely punctured, more coarsely and closely in front and at sides, a vague longitudinal carina often present. Elytra two-fifths wider than prothorax, one-fourth longer than wide, each elytron rounded at its apex, lateral margins subparallel, disk unevenly, irregularly punctate. Posterior margin of first ventral segment slightly bisinuate, the following segments with straight margins. Abdomen moderately, coarsely punctate. Tarsal claws armed with a large tooth. Length 1.5 mm. to 2.5 mm., from the base of rostrum to the apex of the elytra; breadth .8 mm. to 1.5 mm.

The female differs from the male in being larger, more robust, in having the median carina of the head much less developed or entirely absent, and in having a shallow impression on the posterior margin of the first ventral segment.

Holotype, male (No. 3623, Mus. Calif. Acad. Sci.). Allotype, female (No. 3624, Mus. Calif. Acad. Sci.), and thirteen paratypes taken by the author at Crane Flat, Mariposa County, Yosemite National Park, California, on August 2, 1930. Designated paratypes in Dr. E. C. Van Dyke's collection deposited in the Museum, California Academy of Sciences; the remainder in the author's collection.

In Pierce's key 1 this species would come between rufipennis Pierce, and viridis Pierce. It most closely resembles Auletes viridis Pierce. However, the general facies of mariposæ is

¹ Pierce, Proc. U. S. Natl. Mus., Vol. 37, 1909, pp. 326-327.

quite distinct. It may be distinguished from A. viridis as follows: greenish blue instead of green, larger, more robust, the pile whiter, more erect, longer and sparser, the antennæ inserted at the basal third of the beak, not at the basal fourth as in viridis, the club shorter than the preceding portion of the antenna and loosely articulated, the two being equal in viridis and the club more compact, the sutures between the segments less deeply impressed, and the apical segment more rounded and not acute as in mariposæ, the first ventral segment slightly bisinuate on its posterior margin instead of straight, and the punctation not as coarse and close as in viridis.

Mr. L. L. Buchanan, who very kindly compared mariposæ with the type of viridis writes the following interesting note: "The antenna of viridis is peculiar in that the funicle is only six-segmented in three of the four specimens, the third and fourth segments being fused. The type specimen has a seven-jointed funicle, although the suture between segments three and four does not seem to be as deep as usual."

I have compared mariposæ with two specimens of viridis found in the Koebele collection at the California Academy of Sciences. These specimens were collected in Siskiyou County, and are thus undoubtedly of the series from which the type of viridis was selected.

Note on the Antenna and Frons of Larvæ of the Curculionidæ

To those interested in classification characters presented by larvæ of this family, the suggestion is made that Otiorhynchine forms may be separated from all others, first by shape of the apical antennal segment, and secondly, by the absence of a median frontal carina. All of the information the writer has been able to gather up to the present indicates that Otiorhynchine larvæ have a transversely oval and usually rather large apical antennal segment. In the remainder of the family this segment is quite small as compared to the basal part, is round, and often conical. Criticism of these suggestions will be welcomed.—H. H. Keifer, California Department of Agriculture, Sacramento, California.